

REMARKS/ARGUMENTS

Favorable reconsideration of this application is respectfully requested.

Claims 1, 3-10, and 18-24 are pending in this application. Claim 2 is canceled by the present response without prejudice. Claims 11-17 were previously canceled without prejudice.

Claims 1, 2, 6, 7, 18, and 19 were rejected under 35 U.S.C. § 103(e) as anticipated by U.S. patent 5,427,579 to Kanehara et al. (herein "Kanehara"). Claims 21-24 are allowed. Claims 3-5 and 20 were objected as dependent upon a rejected base claim, but were noted as allowable if rewritten in independent form to include all of the limitations of their base claims and any intervening claims.

Initially, applicants gratefully acknowledge the indication of the allowable subject matter of claims 3-5 and 20 and of the allowance of claims 21-24.

Addressing now the rejection of claims 1, 2, 6, 7, 18, and 19 under 35 U.S.C. § 102(b) as anticipated by Kanehara, that rejection is traversed by the present response.

Claim 1 is amended by the present response to now incorporate limitations from dependent claim 2. Thus, the amendments to claim 1 do not raise any issues that would preclude entry of the present response. Applicants respectfully submit such features recited in amended claim 1 clearly distinguish over the applied art.

First, a brief explanation of the claim features is believed to be helpful. According to independent claim 1, when the thrust of at least one of a driving pulley and a following pulley is changed, resulting in a change in a thrust ratio, the thrust of at least one of the driving pulley and the following pulley is controlled based on the state of change of the thrust ratio. That is, a pulley thrust is controlled, for example so that a belt does not slip, based on a state of change of a thrust ratio when the pulley thrust is changed.

Further, as now also recited in claim 1 “the pulley thrust is controlled such that the thrust ratio *approaches a point at which the gradient of change of the thrust ratio changes*” (emphasis added).

With reference to Figure 2 in the present specification as an example, based on a supplied state of change of the thrust ratio, a point where the direction of changing of a thrust ratio is inverted (a point where a thrust ratio peaks) according to changing of the thrust ratio is determined, and the pulley thrust is controlled such that the thrust ratio approaches that point.¹ For example in Figure 2 in the present specification the pulley thrust is controlled so that the thrust ratio approaches its peak point.

As also discussed in the present specification for example at page 19, lines 16-22, a change of the thrust can be observed so that a point at which the gradient of the thrust ratio becomes 0 is determined as the peak of the thrust ratio. That is, in one feature, which is reflected for example in amended independent claim 1, a pulley thrust can be controlled such that the thrust ratio approaches a point at which the gradient of change of the thrust ratio changes (i.e., approaches the noted peak point of the thrust ratio).

The above-noted feature is believed to clearly distinguish over the teachings in Kanehara.

The outstanding rejection cites Figure 6 in Kanehara to meet the limitations of claim 2.² However, applicants respectfully submit the disclosure in Figure 6 of Kanehara does not correspond to the claimed features.

Figure 6 in Kanehara merely provides a chart showing an axial thrust force ratio relative to a speed ratio. As shown in Figure 6 as the speed ratio increases the axial thrust force ratio decreases.

¹ See for example the present specification at page 12, lines 13-20.

² Office Action of April 5, 2005, page 2, prenumbered paragraph 2.

However, such an observation in Kanehara is unrelated to the features clarified in the claims. As noted above, claim 1 as amended recites that the pulley thrust is controlled such that the thrust ratio approaches a point at which the gradient of change of the thrust ratio changes. As noted above, in one feature that point at which the gradient of change of the thrust ratio changes is a peak point of the thrust ratio. Clearly Figure 6 in Kanehara has no relation whatsoever to even addressing, much less detecting, a peak point of the thrust ratio. Figure 6 of Kanehara merely discloses how an axial thrust force ratio decreases as the speed ratio increases.

Further, Figure 6 in Kanehara does not indicate any operation in which a pulley thrust is controlled such that the thrust ratio approaches the noted point. Figure 6 is irrelevant with respect to controlling a pulley thrust.


In such ways, applicants respectfully submit the features recited in amended independent claim 1 clearly distinguish over the teachings in Kanehara. Thereby, independent claim 1, and each of the claims dependent therefrom, are also believed to be allowable.

Applicants also note withdrawn claims 8-10 are still pending in this application. Those withdrawn claims 8-10 all depend from amended independent claim 1, and thus amended independent claim 1 is generic to those withdrawn claims 8-10. As amended independent claim 1 is allowable for the reasons discussed above, withdrawn claims 8-10 must now be reinstated, and are also believed to be allowable.

As no other issues are pending in this application, it is respectfully submitted that the present application is now in a condition for allowance, and it is hereby respectfully requested that this case be passed to issue.

Respectfully submitted,

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